

**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:	Confirmation No.: 9073
Eva-Maria LEPPANEN, <i>et al.</i>	Art Unit: 2442
Application No.: 10/530,759	Examiner: Jason D. RECEK
Filed: June 23, 2005	Attorney Dkt. No.: 059643.00602
For: COMMUNICATION SYSTEM	

**DECLARATION UNDER 37 C.F.R. § 1.131**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

We, Eva-Maria LEPPANEN, Juha Mikael KALLIOKULJU, and Mikko Aleksii LONNFORS, hereby declare and state:

1. We are the sole inventors for the above-identified application, U.S. Patent Application Serial No. 10/530,759, filed on June 23, 2005, which is a U.S. National Stage Application of PCT Application No. PCT/IB2002/004388 filed on October 9, 2002.

2. Nokia Siemens Networks Oy is the owner of the above-identified application ("Assignee"), by virtue of the Assignment recorded on February 21 2008 at Reel 020550, Frame 0001, in the United States Patent & Trademark Office.

3. Prior to October 1, 2002, we prepared the enclosed Invention Report 39584 titled "Filtering For Presence List Subscriptions," describing the subject matter to be used in preparation of the PCT application from which the above-cited application claims

priority. This document demonstrates that prior to October 1, 2002, we were in possession of the invention and able to describe the invention so as to enable a person of skill in the art to make and use the invention. The title of the invention was changed to "Communication System" during the preparation of the PCT application.

4. Prior to October 1, 2002, we conceived the invention, as evidenced by the enclosed Invention Report 39584, submitted on September 23, 2002 to legal counsel (Page, White & Farrer), describing the subject matter to be used in preparation of the PCT application from which the above-identified application claims priority. This document demonstrates that prior to October 1, 2002, we were in possession of the invention and were able to describe the invention so as to enable a person skill in the art to make and use the invention.

5. A copy of the Invention Report 39584 illustrating submission of the Invention Report is enclosed.

6. A confirmation of receipt of the Invention Report 39584 was received on September 23, 2002 from the legal counsel confirming that a draft specification would be prepared based on the Invention Report, which would be filed by October 9, 2002.

7. Copies of e-mails exchanged between September 25, 2002 and September 27, 2002 from each one of us with the legal counsel are enclosed. These e-mails reflect our diligent efforts to coordinate a meeting with the legal counsel to discuss the Invention Report 39584 as a step in the preparation of the PCT application of the above-referenced application.

8. Upon diligent review and approval of the Invention Report 39584, the PCT application was duly prepared. The Invention Report 39584 was used in preparation of the PCT application.

9. Given the completeness of the Invention Report, we can state that the invention disclosed in PCT Application No. PCT/IB2002/004388 and U.S. Patent Application Serial No. 10/530,759 was invented prior to October 1, 2002.

10. Since U.S. Patent Publication No. 2004/0062383 to Sylvain ("Sylvain") was filed October 1, 2002 and published April 1, 2004, Sylvain is not available as prior art to any aspects of the above-identified application. Sylvain's filing date and publication date are after the date of the Invention Report 39584 relating to the above-identified application. Therefore, Sylvain does not qualify as prior art under any of the sections of 35 U.S.C. §102.

11. The Invention Report 39584 effectively demonstrates that the present application was conceived before the filing date of Sylvain coupled with due diligence, from prior to filing date of Sylvain, until the claimed invention was filed as PCT application on October 9, 2002.

12. We affirm that all statements made herein are believed to be true and, further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the present application, or any patent issuing thereon.

Date: \_\_\_\_\_

Signed: \_\_\_\_\_

Eva-Maria LEPPANEN  
Citizen of Finland

Date: 27.1.2010

Signed: \_\_\_\_\_

  
Juha Mikael KALLIOKULJU  
Citizen of Finland

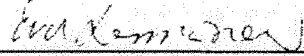
Date: \_\_\_\_\_

Signed: \_\_\_\_\_

Mikko Aleksi LONNFORS  
Citizen of Finland

12. We affirm that all statements made herein are believed to be true and, further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the present application, or any patent issuing thereon.

Date: 29.1.2010

Signed:   
Eva-Maria LEPPANEN  
Citizen of Finland

Date: \_\_\_\_\_

Signed: \_\_\_\_\_  
Juha Mikael KALLIOKULJU  
Citizen of Finland

Date: \_\_\_\_\_

Signed: \_\_\_\_\_  
Mikko Aleks LONNFORS  
Citizen of Finland

12. We affirm that all statements made herein are believed to be true and, further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the present application, or any patent issuing thereon.


Date: \_\_\_\_\_

Signed: \_\_\_\_\_  
Eva-Maria LEPPANEN  
Citizen of Finland

Date: \_\_\_\_\_

Signed: \_\_\_\_\_  
Juha Mikael KALLIOKULJU  
Citizen of Finland

Date: 15. 01. 2010

Signed:  \_\_\_\_\_  
Mikko Aleksi LONNFORS  
Citizen of Finland

**Patent-Agency PWF (EXT-RES/London)**

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**i** This message was sent with High importance

**From:** Sula Miia (NET/Tampere)

**Sent:** Mon 23/09/2002 13:16

**To:** Patent-Agency PWF (EXT-RES/London)

**Cc:**

**Subject:** New Drafting order - NC39584 - deadline 9.10.2002

Dear Mr. Ruuskanen

Based on this invention report, please prepare and file PCT application. The filing deadline is 9.10.2002.  
Please inform me by email that you have received this drafting order.

Our ref. 39584                      Infrastructures-Portfolio

Inventors                      Tel.                      Fax

Eva-Maria Leppänen                      +358718077066                      +358718075002

Nationality: FI

Home address: Veisunkatu 82 C 14, 33820 Tampere

Juha Kalliokulju                      +358718040138                      +358718048358

Nationality: FI

Home address: Jokioistentie 5, 37470 Vesilahti

Mikko Lönnfors                      +358718036402                      +358718036852

Nationality: FI

Home address: Hämeentie 70 C 49, 00550 Helsinki

File patent application                      09.10.2002

Nokia Responsible                      Miia Sula

Br,  
Miia Sula  
Patent Engineer  
Nokia Networks

### INVENTION REPORT

Title of invention: FILTERING FOR PRESENCE LIST SUBSCRIPTIONS		<b>INVENTION REPORT RECEIVED</b>	
		Code: 39584	Patent Committee:
<b>THE DESCRIPTION OF THE INVENTION MUST BE ATTACHED</b>		Place:	Date:
		Signature:	
Inventor's name, employee number, title and nationality: *) Eva-Maria Leppänen, 10051483, Finnish Juha Kalliokulju, 10045752, Finnish Mikko Aleksii Lönnfors, 10052648 Research Engineer, Finish	Home Address: *)	Business Unit and cost centre: NET/IMN, 1006104 NMP/MSW NRC/COM, 1007930	
Line Manager(s): Elina Virta-Koskinen			
Project : *) CN2k+PMG, Farrago, SIPPING		Project Manager: Markus Isomäki	
Office address: *) HVT 30, 33100 Tampere			
Phone: *)		Fax: *)	
The invention becomes public on:			
<p><i>I am/ We are the sole/ and original inventor(s) of this invention.</i></p> <p><i>The company may, by virtue of applicable legislation, be entitled to full or partial rights to the invention.</i></p> <p><i>I/ We acknowledge my/ our obligation to sign as inventor(s) all documents that may be required for protecting the invention in different countries.</i></p> <p><b>Applicable to inventions made by inventors employed in FI, DK, DE and SE only.</b></p> <p><i>Unless the inventor requests the Invention Report to be responded to within four (4) months from the date this Invention Report is received or such other period as the mandatory provisions of the applicable local law may otherwise require, the inventor consents to the right of the employer to use a reasonable period of time for the evaluation of the invention. A reasonable period of time may exceed four (4) months.</i></p> <p><input type="checkbox"/> <i>I/ We request that the Invention Report be responded to within four (4) months.</i></p> <p>Date:</p> <p>Signature(s) of Inventor(s):</p>			

\*) See the instructions

<i>I have read and understood the invention described in this Invention Report</i>		1
Date:		
Signature of Manager		



**INSTRUCTIONS FOR COMPLETING THE INVENTION REPORT**

This Invention Report form is used in cases where an invention has been made by an employee of the Company. This Invention Report is confidential. Only the Patent Department may make copies of signed Invention Reports in order to request opinions or reply to the inventor(s).

The inventor completes the Invention Report and the description of the invention. The inventor does not fill in the 'Invention Report received' field. This field is filled in by the Patent Department. The Invention Report must have the names of all the inventors and their home addresses. If there is not enough space for all the names, addresses etc, please write them on a separate attachment. The first mentioned inventor is assumed to be the contact person in matters concerning the Invention Report. In the fields of office address, phone and fax, please fill in the contact person's information. Fill in the project field, if the invention is made in a project. The original Invention Report is signed by all inventors. Each page of the original Invention Report is signed by a Manager. In case it is difficult to obtain Manager's signature your Patent Department will take care of it.

It is suggested that the Invention Report and the description of the invention should be filled in as thoroughly as possible. If drawings or other kind of information cannot be attached to this form, they should be delivered separately.

The signed Invention Report is given directly to the local or business unit's Patent Department. Invention Report should also be sent by E-mail to the Patent Department. The Patent Engineer will inform the inventor of receiving the Invention Report. The Patent Engineer will obtain any expert opinions needed to properly evaluate the invention, will procure the Company's decision and inform the inventor accordingly.

*I have read and understood the invention described in this Invention Report*

2

Date:

Signature of Manager

## **DESCRIPTION OF THE INVENTION**

Please, describe your invention in the following order. You can enclose the drawings on a separate document.

### **1. Field and background of the invention**

The field of this invention is the Presence Service, and more specifically Presence list (also known as buddylist) functionality.

The purpose of the invention is to introduce a solution for setting filter criteria of presence information (both the content and when information is delivered) in a case when the user (called "watcher") requests presence information of the set of other users by making a group subscription.

### **2. A summary of the invention**

### **3. Describe the problem which the invention overcomes**

There might be quite a lot of presence information (PI) related to one user, but only part of it is needed or utilised at a time. A mechanism (the filtering concept) has already been specified for a user (who acts as a watcher) to be able to indicate specific information which the user is interested in receiving instead of the whole available information.

Currently when the watcher wants to fetch or subscribe some other user's presence information it includes the filter criteria in the method by which the information request is made.

For optimisation and other reasons, the watcher is also able to subscribe or request presence information of several users by making a single request to a group of other users (just indicating the id of the group). The server in the network then makes the separate, normal requests to each user of the group on behalf of the watcher.

The filtering solution has not yet been defined for single presentity case in IETF and subsequently there are no mechanisms for filtering in the presence list (buddylist case). The most obvious solution would be to include all the filters to the subscribe request and presence list server would be responsible to extract right filter to each individual subscription. However, this solution would waste unnecessarily radio resources and therefore it is not preferable.

### **4. How was the problem solved earlier?**

Presence Service is specified in 3GPP. The basic functionality of the presence list subscription is specified by IETF. The filtering solutions for single subscription case are under discussion in IETF. There is no solution available how the filtering is applied to the group subscription case.

### **5. How does the invention improve earlier solutions? Advantages and disadvantages of the invention?**

- + saving of load in air interface
- + no need to store filtering for each individual (group) in terminal
- + part of solution of "presence information filtering" and enhancements to Presence list functionality
- requires means to manage filtering criteria in the presence list server

*I have read and understood the invention described in this Invention Report*

3

Date:

Signature of Manager

**6. Brief description of the drawings (Please enclose drawings and figures of the invention on a separate document)**

The figure 1 represents a basic list subscription case where watcher subscribes with a single subscription to a list of presentities. Watcher gives presence list filtering rules in subscribe request and based on that information presence list server is able to create filtering rules for all individual subscriptions which will be sent to presentities.

Other case is that filtering rules already exists in the presence list server in which case watcher does not have to include filtering rules into each subscription request (as defined in the figure 2) which will save the radio resources as the list of interesting presentities as well as the information from them is expected to be rather static.

**7. A more detailed description of the invention (if known at the moment)**

The filter criteria are stored in the server in the network where also the presence list information is stored. The watcher does not include any filter in the presence list subscription but the server in the network, which does the separate subscriptions to users found from the Presence list on behalf of the watcher, is able to add the filtering criteria to each individual subscription.

The filter information (criteria) which is stored in the server is managed by the terminal with the similar procedures which are also used for managing other information e.g. the users in the Presence list and/or authorisation information in the server.

**8. Explain, how the invention is/can be implemented. Which would be the best mode of implementation?****9. Explain how we can recognise if a competitor is using the same product/feature?****10. Is it planned to use the invention in a Nokia product? If so, when and in which product?  
Is the invention standard related?**

Terminal and Presence (or application) server products (NMP/NET) might utilise this.

Standardisation aspects:

The solution described by the invention will be contributed in 3GPP (and the next time when it comes public is in the beginning of Oct).

**11. Abbreviations****12. Any further comments**

*I have read and understood the invention described in this Invention Report*

4

Date:

Signature of Manager

**Patent-Agency PWF (EXT-RES/London)**

---

**To...** IMN IPR (RES/Helsinki)

**Cc...**

**Bcc...**

**Subject:** NC39584WO - Confirmation New Assignment

**Attachments:**

Dear Sirs

We confirm receipt of the new assignment for NC39584 and confirm that we will provide you with a draft specification in good time for filing by 9th October 2002. The person who will be responsible for this case will be JP Ruuskanen.

Yours faithfully  
PAGE WHITE & FARRER

**Patent-Agency PWF (EXT-RES/London)**

**From:** Patent-Agency PWF (EXT-RES/London)  
**To:** Lonnfors Mikko (NRC/Helsinki)  
**Cc:**  
**Subject:** RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT  
**Attachments:**

**Sent:** Fri 27/09/2002 14:15

Mikko

The meeting will be at 14.00 and we are able to have the teleconference from our offices.

Kind regards

Kelda Style

-----Original Message-----

**From:** Lonnfors Mikko (NRC/Helsinki)  
**Sent:** Fri 27/09/2002 12:36  
**To:** Patent-Agency PWF (EXT-RES/London)  
**Cc:**  
**Subject:** RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

Hi,

That should be ok for me. Could you send me the meeting time and are we able to have phone conference to out Tampere site from your office?

best regards  
- Mikko

> -----Original Message-----

> **From:** Patent-Agency PWF (EXT-RES/London)  
> **Sent:** 27 September, 2002 14:08  
> **To:** Lonnfors Mikko (NRC/Helsinki)  
> **Subject:** RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

>

>

> Dear Mikko

>

> Can I suggest that we meet at out Helsinki Office. Please  
> let me know if this is convenient. Our address is as follows:

>

> Runebeginkatu, 5, 10th Floor, FIN-00100, Helsinki

>

> Yours sincerely

>

>

> Kelda Style

>

> -----Original Message-----

> **From:** Lounfors Mikko (NRC/Helsinki)  
> **Sent:** Fri 27/09/2002 11:58  
> **To:** Patent-Agency PWF (EXT-RES/London); Kalliokulju  
> Juha (NMP/Tampere); Leppanen Eva-Maria (NET/Tampere)  
> **Cc:**  
> **Subject:** RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

>

>

>

**Patent-Agency PWF (EXT-RES/London)**

**From:** Kalliokulju Juha (NMP/Tampere) **Sent:** Wed 25/09/2002 11:25  
**To:** Leppanen Eva-Maria (NET/Tampere); Lonnfors Mikko (NRC/Helsinki); Patent-Agency PWF (EXT-RES/London)  
**Cc:**  
**Subject:** RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT  
**Attachments:**

Moi,

I will be available only in the morning not Monday or Tuesday afternoon.

-jk-

> -----Original Message-----

> From: Leppanen Eva-Maria (NET/Tampere)  
> Sent: 25 September, 2002 11:17  
> To: Lonnfors Mikko (NRC/Helsinki); Patent-Agency PWF (EXT-RES/London);  
> Kalliokulju Juha (NMP/Tampere)  
> Subject: RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

>

>

> Hi,

>

> I'm available if needed on Monday afternoon, but I'm in Tampere

> (not in Helsinki). Mikko, could you please call me to make a

> teleconference if

> we'll end up to have a meeting.

>

> BR, Eva

>

>> -----Original Message-----

>> From: Lonnfors Mikko (NRC/Helsinki)  
>> Sent: 25. September 2002 10:28  
>> To: Patent-Agency PWF (EXT-RES/London); Leppanen Eva-Maria  
>> (NET/Tampere); Kalliokulju Juha (NMP/Tampere)  
>> Subject: RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

>>

>>

>> Hi,

>>

>> I am available on Monday and Tuesday afternoon.

>>

>> regards

>> - Mikko

>>

>>> -----Original Message-----

>>> From: Patent-Agency PWF (EXT-RES/London)  
>>> Sent: 24 September, 2002 13:46  
>>> To: Leppanen Eva-Maria (NET/Tampere); Kalliokulju Juha  
>>> (NMP/Tampere);  
>>> Lonnfors Mikko (NRC/Helsinki)  
>>> Subject: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

>>>

>>>

>>> Dear All

>>>

>>> I will be in Finland next week. Would you like to meet up

>>> and discuss the case so that we can move it forward?

>>>

>>> I am free Monday afternoon or Tuesday afternoon of next week.

>>>

>>> Please let me know if you are free.

**Patent-Agency PWF (EXT-RES/London)**

---

**From:** Leppanen Eva-Maria (NET/Tampere) **Sent:** Wed 25/09/2002 09:16  
**To:** Lonnfors Mikko (NRC/Helsinki); Patent-Agency PWF (EXT-RES/London); Kalliokulju Juha (NMP/Tampere)  
**Cc:**  
**Subject:** RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT  
**Attachments:**

Hi,

I'm available if needed on Monday afternoon, but I'm in Tampere (not in Helsinki). Mikko, could you please call me to make a teleconference if we'll end up to have a meeting.

BR, Eva

> -----Original Message-----

> From: Lonnfors Mikko (NRC/Helsinki)  
> Sent: 25. September 2002 10:28  
> To: Patent-Agency PWF (EXT-RES/London); Leppanen Eva-Maria (NET/Tampere); Kalliokulju Juha (NMP/Tampere)  
> Subject: RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

>

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> regards

> - Mikko

>

>> -----Original Message-----

>> From: Patent-Agency PWF (EXT-RES/London)  
>> Sent: 24 September, 2002 13:46  
>> To: Leppanen Eva-Maria (NET/Tampere); Kalliokulju Juha (NMP/Tampere);  
>> Lonnfors Mikko (NRC/Helsinki)  
>> Subject: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

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>> and discuss the case so that we can move it forward?

>>

>> I am free Monday afternoon or Tuesday afternoon of next week.

>>

>> Please let me know if you are free.

>>

>> Yours sincerely

>>

>>

>>

>> Kelda Style

>>

>

**Patent-Agency PWF (EXT-RES/London)**

---

**From:** Lonnfors Mikko (NRC/Helsinki) **Sent:** Wed 25/09/2002 08:27  
**To:** Patent-Agency PWF (EXT-RES/London); Leppanen Eva-Maria (NET/Tampere); Kalliokulju Juha (NMP/Tampere)

**Cc:**

**Subject:** RE: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

**Attachments:**

Hi,

I am available on Monday and Tuesday afternoon.

regards

- Mikko

> -----Original Message-----

> From: Patent-Agency PWF (EXT-RES/London)

> Sent: 24 September, 2002 13:46

> To: Leppanen Eva-Maria (NET/Tampere); Kalliokulju Juha (NMP/Tampere);

> Lonnfors Mikko (NRC/Helsinki)

> Subject: NC 39584WO (301836WO/KCS/erw) NEW DRAFT

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> Kelda Style

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